



Reef 2050 Plan

INDEPENDENT EXPERT PANEL - MINUTES

Date: Friday, 29 July, 9:00am – 4:30pm AEDT

Venue: Videoconference

ATTENDEES

Members

Prof Ian Chubb AC, Chair	Prof Helene Marsh AO
Dr Richard Brinkman *	Dr Russell Reichelt AO
Prof Damien Burrows	Dr Stuart Whitten
Prof Terry Hughes	Ms Jane Waterhouse
Prof Catherine Lovelock *	Prof Kerrie Wilson *
Adj Assoc Prof Stephan Schnierer	

* Attended in an observational capacity only

Other attendees

Hon Tanya Plibersek MP	Minister for the Environment and Water
Dr Cathy Foley AO	Chief Scientist of Australia
Prof Hugh Possingham	Queensland Chief Scientist
Ms Paula Perrett	Assistant Secretary, Department of Climate Change, Energy, the Environment and Water (DCCEEW)
Ms Catharina van Moort	Director, Secretariat (DCCEEW)
Mr Halley Rowe	Assistant Director, Secretariat (DCCEEW)
Mr Peter David	Policy Officer, Secretariat (DCCEEW)
Elisa Nichols	Executive Director, Office of the Great Barrier Reef, Department of Environment and Science.
Louise Smyth	Director, Office of the Great Barrier Reef, Department of Environment and Science
Dr Teena Browning	Director, Great Barrier Reef Marine Park Authority
Dr David Wachenfeld	Chief Scientist, Great Barrier Reef Marine Park Authority
Dr Roger Shaw	Chair, Reef Water Quality Independent Science Panel
Mr Tony Weber	National Leader, Water Modelling, Alluvium Consulting
Ms Theresa Fyffe	Executive Director Projects and Partnerships, Great Barrier Reef Foundation

Mr Robert Speed	Director, Water Quality, Great Barrier Reef Foundation
Ms Lee-Anne Molony	Principal Consultant, Clear Horizon Consulting
Dr Cedric Robillot	Executive Director Reef Restoration and Adaptation Program R&D Program, Great Barrier Reef Foundation
Dr Ian McLeod	RRAP Program Director, Australian Institute of Marine Science
Dr Carly Randall	Benthic and Restoration Ecologist, Australian Institute of Marine Science
Prof Madeleine Van Open	Senior Principal Research Scientist, Australian Institute of Marine Science
Dr Daniel Harrison	Senior Lecturer, Southern Cross University
Mr Mayuran Sivapalan	Project Manager, Modelling and Decision Support, Adaptus

1. Acknowledgement of Country
The Chair acknowledged the traditional custodians of the lands on which the meeting was held, and paid respects to their Elders past, present and emerging.
2. Welcome to Members
The Chair welcomed members to the meeting and outlined the main items of business on the agenda, which would include a scene setting discussion, an address by the Minister for the Environment and Water, The Hon Tanya Plibersek MP, an update on the Scientific Consensus Statement, update from Reef Water Quality Independent Science Panel, update on the Independent Review of the Agricultural Management Practice Adoption Target for the Reef 2050 Water Quality Improvement Plan, a 'deep dive' into program evaluation and cost-effectiveness with the Great Barrier Reef Foundation (GBRF) and a 'deep dive' into reef restoration and adaptation science with the GBRF.
3. Conflict of Interest
Panel members declared actual and perceived conflicts and the Chair outlined actions to manage potential conflicts in accordance with the Panel's protocol.
4. Scene setting discussion
Ms Perrett provided the Panel with an update to note developments at the Federal level since the last IEP meeting on 28 February 2022, including: <ul style="list-style-type: none"> • Election of a new Federal Government; • An additional \$194.5 million in Great Barrier Reef (Reef) funding; and

- Deferred meeting of the World Heritage Committee, including consideration of the Reef's state of conservation, which had initially been scheduled for June 2022.

The Panel noted these developments and briefly discussed the State of Environment Report indicating that Indigenous Knowledge and well-being were well integrated and that future revisions of the Reef 2050 Plan should consider following a similar route.

The Panel discussed effective messaging for the reef noting that the reef is more than coral and messaging about the reef should clearly reflect that it covers the entire ecological system.

Dr Wachenfeld informed the Panel that the next Great Barrier Reef Long Term Monitoring Program update was due in August and he would be able to give the Panel a more thorough update at next meeting.

5. Minister's Address

The Panel introduced themselves to the Minister for the Environment and Water, The Hon Tanya Plibersek MP.

The Minister addressed the Panel, thanking them for the valuable work and advice they have provided to the Commonwealth and Queensland Governments over the years. The Minister noted that she expects the Panel to give her more advice on how to best account for current and future effects of climate change and how to best mitigate those effects.

The Minister asked the Panel to consider how science could be better shared and applied in other international settings (e.g., the Pacific regions) as the Government does not want to just keep advice to benefit Australia.

The Minister stated it was not apparent whether previous Government investment had impacted the Reef in ways it was hoped and asked the Panel to consider work that had been previously completed on the Reef and whether it was effective, particularly in water quality and runoff. This would help the Government ensure that it was getting desired outcomes.

The Minister indicated that she was interested in a previous advice from the Panel around changing legislative barriers to improve land use along the Reef and whether there are practises that the Government could implement to better land management.

The Panel discussed the points the Minister raised, noting that the current funding is heavily tipped towards water quality. When you consider the impact that threats such as climate change or Crown of Thorns Starfish have on the reef proportionally compared to water quality, the funding may not be in proportion to the scale of the issue.

The Chair thanked the Minister of behalf of the Panel and stated that the Panel would happily respond to any letters or questions that she may have.

6. Panel Business

The Panel endorsed the minutes of Meeting 22, held on 28 February 2022, and noted they would be published on the Panel's page of the Department of Climate Change, Energy the Environment and Water website shortly after this meeting.

The Panel noted the status of actions arising from previous meetings noting that there were no out-of-session items finalised since the last meeting.

The Chair noted that four Panel members have stepped down and that three were still awaiting reappointment. The reappointment process could not be finalised prior to the caretaker period that preceded the recent Federal election. The Chair advised that a process to appoint members was underway, and that an update would be provided once a decision had been made by Ministers.

A members' only session was held as part of this item.

7. Update on Scientific Consensus Statement

Ms Waterhouse provided an update on the development of the Scientific Consensus Statement (SCS), related processes and the scope of nominations for two expert working groups to support the SCS peer review and consensus processes.

The Panel noted the update and sought further information on the independence and transparency of the expert working groups.

The Panel discussed the SCS guiding principles, noting that:

- the process itself must be fit for purpose for the questions being asked and in the context of the reef and its stakeholders – it must be defensible
- having an international lead of the editorial board could cause problems due to time zones
- there should be a conflict-of-interest declaration for editors who were assigning reviewers
- it is important that a list of reviewers be available, however not be identified against the work they reviewed, instead potentially naming reviewers in a single list alphabetically. They would be asked for prior consent, and if they did not agree other reviewers would be found
- it is important that the SCS be communicated in a plain and simple way that anyone could follow as 'too often scientists write for scientists too often'.

The Panel endorsed the SCS guiding principles, recommending changing the language of the heading to '*Ensuring integrity through the following guiding principles*'.

The Panel agreed that they would submit nominations for the two expert working groups out of session.

8. Update on the work of the Independent Science Panel

Dr Shaw provided an update from five meetings of the Reef Water Quality Independent Science Panel (ISP) held between March and July 2022 and invited the Panel to present ideas for the ISP to consider.

The Panel noted the update and endorsed the two recommendations from the report:

That IEP support the review of the non-agricultural and urban pollutants research program projects by ISP with a guest member attending relevant sessions if required

- Dr Shaw noted that the guest member would not have to be an IEP member and would be proposed at the upcoming planning workshop on 15 September.

That IEP endorse option B to develop the water quality targets with the proposed timeline of completion by December 2023

- the Panel noted that the recommendation would be subject to Ministerial approval.

The Panel discussed the new approach for scoring and grading for report cards, noting when it comes to the catchment models it appears indicators are not relatively well weighted.

The Panel sought further information on:

- is there linkage between report cards and underlying models and are they aligned or different?
- that the approach is only for regional report cards, will effort be made to include the broader reef report card with scoring for consistency?

It was noted that the Reef Water Quality Report Card is predominantly the scoring of progress towards targets, not against guidelines.

Dr Shaw invited the Panel to consider items for ISP to bring to the strategic planning session in November. The Panel agreed to consider and contact Dr Shaw out of session.

The Panel will consider whether an additional briefing on the ISP's work will be needed for the next meeting.

9. Update on land management practice targets

Mr Weber provided an update on the Independent Review of the Agricultural Management Practice Adoption Target for the Reef 2050 Water Quality Improvement Plan. He noted a final draft of the report would soon be available.

The Panel noted the update and sought further information on:

- whether the targets are evidence based and how the work would inform the rollout of the \$1.2b funding package
- the initial assumptions around adoption curves, as they appear very optimistic to grazing
- understanding whether additional compliance activities around dissolved inorganic nitrogen would make much difference.

The Panel noted that this work could have other benefits for terrestrial and marine biodiversity that are not being recorded and that most of fine sediment is coming from gullies which will keep eroding regardless of agricultural practices.

The Panel requested:

- access to the final report on land targets before it is finalized
- a presentation on the Reefonomics tool.

10. Program Evaluation and Cost-Effectiveness

Ms Molony and Mr Speed provided an update on Reef Trust Partnership (RTP) program evaluation, including an overview of how cost effectiveness is measured in the Water Quality Component of the RTP.

The Panel noted the update and discussed some concerns they had with the evaluation:

- while being mindful that in the reef community there is a limited number of people, there is a huge burden of reliance on experts. Further thought may be needed on the best ways to obtain information from experts.
- noted confusion over how the evaluation report was undertaken, citing that there is a cumulative impact of consulting the same people
- communication is very important, explanations of what phrases such as 'strong progress' actually mean need to be included in the executive summary as well as the full report
- the word 'poor' doesn't appear in the executive summary, not everything is 'moderate', 'good', 'strong' or 'largely strong'. The Panel would like to see these words against targets and see how they will measure progress towards the targets.

The Chair requested to see what the GBRF was proposing to send to the Minister so the Panel could give a detailed response considering their concerns and noted that he would pass on some of the concern shown by the Panel to the relevant individuals.

11. Reef Restoration and Adaptation Science

Dr Robillot, Dr McLeod, Dr Randall, Prof Van Oppen, Dr Harrison and Mr Sivapalan provided an update on the RTP Reef Restoration and Adaptation Science component (Reef Restoration and Adaptation Program), including R&D areas relating to Coral Aquaculture and Deployment, Enhanced Corals and Treatments, Cloud Brightening and Modelling and Decision Support.

The Panel noted the update and sought further information on:

- how the ongoing research and development of programs such as enhanced corals integrate with deployment?
- clarification on the meaning of 'heat tolerance'. The Panel stated that there could be situations when a coral has a very small 'heat tolerance' change (e.g. a 0.1 increase), in which case it would not be worth pursuing further research
- the scaling up of models surrounding cloud brightening
- is the GBRF progressing with the physics understanding of brightening in tandem with the engineering to come to final decision?

The Panel cited concerns around data timeframes, stating we appear to be very far away from the time when the lifetime fitness of 'enhanced' corals will be better than that of 'wild' corals.

The Panel noted that the design of the programs appeared to be incredibly narrow in terms of trying to restore Australia's biodiversity and requested that the Department arrange a coordination/mapping exercise to ensure that overlap between Government initiatives (e.g. research) is properly considered, to avoid duplication and identify any synergies.

The Panel also noted that there could be knock-on actions from things like fogging that could be of benefit or consequence.

The Panel requested a further presentation when it is at a more advanced stage and has collected more data.

12. Panel Business

The Panel noted that a communique would be finalised out of session and released on the Department's [website](#).

The Panel noted proposed timing for remaining Panel meetings in 2022 with the next meeting proposed for November. The Panel noted that the secretariat would identify a range of dates out of session and liaise with the Chair and members before selecting final dates.

The Panel requested:

- a briefing on the AIMS Long Term Monitoring Plan as part of the next meeting
- further detail from GBRF on the social acceptability and regulatory issues, associated with the RRAP interventions
- to initiate conversation with relevant people to begin to think how to prepare for and respond a coral disease disaster. A disease disaster could lead to unpredictable events that are potentially catastrophic and that on GBR we are completely underprepared for such an event.

The meeting closed at 4.30pm.

DRAFT